

## CLAIMS

What is claimed is:

1. A CATV communication network, comprising:  
a local/remote hub for communicating with at least one  
headend/central office; and  
at least one set-top terminal for receiving a CATV signal comprising a  
5 plurality of channels over a transmission bandwidth from the at least one  
headend/central office, the at least one set-top terminal including a microprocessor  
having a memory, a diagnostic application routine stored in the memory that  
determines a signal strength for a plurality of carrier frequencies of the bandwidth and  
produces a visual indication of the signal strength for the plurality of carrier  
10 frequencies of the bandwidth.
2. The communication network according to Claim 1, wherein the visual  
indication comprises a plot of carrier frequency as a function of signal strength.
3. The communication network according to Claim 2, wherein the plot  
provides an indication of one of Inband, Out of Band, and Data Over Cable System  
Integration Specification carrier frequency.
4. The communication network according to Claim 1, further comprising  
display means for displaying the visual indication produced by the diagnostic  
application routine.
5. The communication network according to Claim 4, wherein the display  
means comprises a television set operatively coupled to the at least one set-top  
terminal.
6. A set-top terminal for receiving a CATV signal comprising a plurality  
of channels over a transmission bandwidth, the set-top terminal comprising:  
a microprocessor having a memory;  
a diagnostic application routine stored in the memory of the  
5 microprocessor that determines a signal strength for a plurality of carrier frequencies  
of the bandwidth and produces a visual indication of the signal strength for the  
plurality of carrier frequencies of the bandwidth.

7. The set-top terminal according to Claim 6, wherein the visual indication comprises a plot of carrier frequency as a function of signal strength.

8. The set-top terminal according to Claim 7, wherein the plot provides an indication of one of Inband, Out of Band, and Data Over Cable System Integration Specification carrier frequency.

9. The set-top terminal according to Claim 6, further comprising display means for displaying the visual indication produced by the diagnostic application routine.

10. The set-top terminal according to Claim 9, wherein the display means comprises a television set operatively coupled to the set-top terminal.

11. A method for diagnosing RF signal strength at a set-top terminal, comprising the steps of:

receiving a CATV signal comprising a plurality of channels over a transmission bandwidth;

5 determining a signal strength for a plurality of carrier frequencies of the bandwidth by utilizing a diagnostic application routine stored in a memory of the set-top terminal; and

producing a visual indication of the signal strength for the plurality of carrier frequencies of the bandwidth.

12. The method according to Claim 11, wherein the visual indication comprises a plot of carrier frequency as a function of signal strength.

13. The method according to Claim 12, wherein the plot provides an indication of one of Inband, Out of Band, and Data Over Cable System Integration Specification carrier frequency.

14. The method according to Claim 11, further comprising the step of displaying the visual indication produced by the diagnostic application routine on a display means.

15. The method according to Claim 14, wherein the display means comprises a television set operatively coupled to the set-top terminal.

16. The method according to Claim 11, further comprising the step of invoking the diagnostic application routine by entering a pseudo secret key sequence into the set-top terminal.

17. The method according to Claim 11, further comprising the step of determining whether a selected carrier frequency is a valid carrier frequency.

18. The method according to Claim 11, wherein the signal strength of the carrier frequency is performed across an entire bandwidth of an RF input spectrum.

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